

**UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS**

**IN RE: BODY SCIENCE LLC
PATENT LITIGATION**

MDL No. 1:12-md-2375-FDS

MEMORANDUM AND ORDER ON CLAIM CONSTRUCTION

SAYLOR, J.

This is a patent dispute involving electronic systems that are used for wireless monitoring of patient body functions. Plaintiff Body Science LLC, holds U.S. Patent No. 6,289,238 (the “238 patent”) and U.S. Patent No. 7,215,991 (the “991 patent”), both entitled “wireless medical diagnosis and monitoring equipment.”¹ Body Science has brought suit for infringement of the patents against three different entities, defendants Polar Electro Inc., A&D Engineering, Inc., and Lifewatch Services, Inc.² Defendants have asserted multiple defenses and counterclaims, including claims of non-infringement and invalidity.

The litigation is now at the claim construction stage. The parties agree on the construction of four terms: (1) “evaluation station” and “evaluator station,” defined as “device with an identified collection of components that detects or determines a property of data”; (2) “sensor for detecting an electric, physical, chemical or biological quantity, and converting the detected quantity into an electric signal” and “sensor . . . operable to detect an electric, physical, chemical or biological property associated with the patient, and operable to convert the detected property into an electric signal,” defined as “component that detects a property of the patient and

¹ Besides sharing the same name, the patents also have identical specifications.

² Body Science has dismissed its claims against four additional parties: Boston Scientific Corporation, Philips Electronics North America Corporation, St. Jude Medical S.C., Inc., and Pacesetter, Inc.

can convert it into an electric signal”; (3) “control the data,” “operative to control,” and “operable to control,” defined as “changing the transmission power of the data or changing the channel of the data (as opposed to manipulate or format the data)”; and (4) “electrode,” defined as “a device that includes the identified collection of electronic components.”³ However, the parties dispute four sets of terms: (1) “manipulate the data”; (2) “formatting data” and “change the format”; (3) “attached to the patient” and “arranged on the patient”; and (4) “covering comprising.”

I. Background

A. Factual Background

On September 11, 2001, the United States Patent and Trademark Office (“PTO”) issued the ’238 patent, which is a continuation of U.S. Patent No. 5, 957,854 (filed Dec. 5, 1997), which, in turn, is a continuation of U.S. Patent No. 5, 862,803 (filed Sep. 2, 1994). On May 8, 2007, the PTO issued the ’991 patent, which is a continuation of the ’238 patent, as well as a continuation of U.S. Patent No. 6,577,893 (filed June 15, 2001). The ’238 patent covers a “medical diagnosis and monitoring system” with “wireless electrodes” that “comprise a digital transmitting and receiving unit” and that “can be used, among other things, for detecting EEG- and EKG-signals, as well as for monitoring body/breathing movements, the temperature, perspiration, etc.” of a patient. U.S. Patent No. 6,289,238, at [57] (filed Aug. 24, 1999). Similarly, the ’991 patent covers a “medical diagnosis and monitoring system having at least one sensor for detecting an electrical, physical, chemical, or biological property of a patient such as, but not limited to, EEG- and EKG-signals, respiration, oxygen saturation, temperature,

³ The parties initially disputed the proper construction of the term “electrode,” but reached an agreement prior to the *Markman* hearing.

perspiration, etc.” U.S. Patent No. 7, 215,991, at [57] (filed Mar. 24, 2003). The claimed invention has two major components: (1) an electrode or sensor that is attached to the patient and detects certain physical properties of the patient and (2) an evaluation station that communicates with that electrode and presents the detected information about the patient. Generally, the invention is used in medical settings to monitor patients while utilizing two-way wireless communication to maintain both freedom of movement of the patient and the accuracy of the reported data.

Body Science owns the '238 and '991 patents. The three defendants manufacture and sell allegedly infringing products.⁴

B. Procedural Background

On May 27, 2011, Body Science filed five separate actions, one each in the Northern District of California, the Northern District of Illinois, the District of Minnesota, the Eastern District of New York, and this Court. On August 6, 2012, pursuant to 28 U.S.C. § 1407, the Judicial Panel on Multidistrict Litigation transferred the cases to this Court for consolidated pre-trial proceedings.⁵ On July 31, 2014, the Court held a *Markman* hearing on the disputed terms in

⁴ LifeWatch manufactures and sells LifeStar Act, LifeStar ACT Ex, LifeStar ACT III, Ambulatory Cardiac Telemetry – CG-6108 ACT, CG-900P Fetal Maternal Monitor, BP Pro, PMP4 Easy2Check, LifeStar, SelfCheck Weight Scale, HealthePod “10 in 1” Wellness Monitor, Fetal Trace Fetal Monitor, SelfCheck ECG, CG-7000DX-BT Diagnostic 12-Lead ECG, Spiro Pro, and Oxy Pro. Polar manufactures and sells Polar FT7, Polar FT4, Polar FT2, Polar FT1, Polar RS100, Polar CS100, Polar FT80, Polar FT60, Polar FT60 G1, Polar FT40, Polar RS300X, RS300X G1, Polar CS300, Polar CS200cad, RS800CX Pro Training Edition PREMIUM, Polar RS800CS, Polar RS400, Polar CS600X, Polar CS500, Polar CS400, Equine Healthcheck, Equine Inzone, Polar Equine RS300X G1, Equine RS800CX G3, Equine RS800CX Science, Equine CS600X Trotting, Polar WearLink + Transmitter with Bluetooth; DataLink USB, and Polar ProTrainer 5 with Polar WebLink Software; Polar Uplink Tool Software; and Polar Precision Performance. A&D manufactures and sells UA-767 PBT, UC-324THW, UA-851THW, HeartView P12/8 BT, XL-20, and CP-1THW.

⁵ On November 27, 2012, Body Science filed suit against St. Jude Medical, Inc., in the District of Minnesota, which case was likewise transferred to this Court for pre-trial proceedings. Body Science and St. Jude have since stipulated to a dismissal of that case.

the claims.

II. Legal Framework

The construction of claim terms is a question of law. *Markman v. Westview Instruments*, 517 U.S. 370, 372 (1996) (“[T]he construction of a patent, including terms of art within its claim, is exclusively within the province of the court.”).

In *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (*en banc*), the Federal Circuit clarified the proper approach to claim construction and set forth principles for determining the hierarchy and weight of the definitional sources that give a patent its meaning. The guiding principle of construction is “the meaning that the term would have to a person of ordinary skill in the art in question at the time of . . . the effective filing date of the patent application.” *Id.* at 1313. Courts thus seek clarification of meaning in “the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.” *Id.* at 1314 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys.*, 381 F.3d 1111, 1116 (Fed. Cir. 2004)).

A. The Words of the Claims

The claim construction analysis normally begins with the claims themselves.⁶ The claims

⁶ In *Phillips*, the Federal Circuit discredited the practice of starting the claim construction analysis with broad definitions found in dictionaries and other extrinsic sources:

[I]f the district court starts with the broad dictionary definition . . . and fails to fully appreciate how the specification implicitly limits that definition, the error will systematically cause the construction of the claim to be unduly expansive. The risk of systematic overbreadth is greatly reduced if the court instead focuses at the outset on how the patentee used the claim term in the claims, specification, and prosecution history, rather than starting with a broad definition and whittling it down.

Id. at 1321. Of course, if no special meaning is apparent after reviewing the intrinsic evidence, claim construction

of a patent “define the invention to which the patentee is entitled the right to exclude.” *Id.* at 1312 (citing *Innova*, 381 F.3d at 1115).

A court may construe a claim term to have its plain meaning when such a construction resolves a dispute between the parties. *See O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1361 (Fed. Cir. 2008); *see also U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997) (“Claim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims, . . . [but] is not an obligatory exercise in redundancy.”).

In some instances, it is the arrangement of the disputed term in the claims that is dispositive. “This court’s cases provide numerous . . . examples in which the use of a term within the claim provides a firm basis for construing the term.” *Phillips*, 415 F.3d at 1314. For example, because claim terms are normally used consistently throughout the patent, the meaning of a term in one claim is likely the meaning of that same term in another. *Id.* In addition, “the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim.” *Id.* at 1314-15.

B. The Specification

“The claims, of course, do not stand alone.” *Id.* at 1315. Rather, “they are part of a fully integrated written instrument, consisting principally of a specification that concludes with the claims.” *Id.* (internal citations and quotations omitted). For that reason, the specification must always be consulted to determine a claim’s intended meaning. “[T]he specification is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best

might then “involve[] little more than the application of the widely accepted meaning of commonly understood words.” *Id.* at 1314.

guide to the meaning of a disputed term.” *Id.* (citing *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)).

“In general, the scope and outer boundary of claims is set by the patentee’s description of his invention.” *On Demand Mach. Corp. v. Ingram Indus.*, 442 F.3d 1331, 1338 (Fed. Cir. 2006); *see also Phillips*, 415 F.3d at 1315-1317 (“[T]he interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim”). “[T]he specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess.” *Phillips*, 415 F.3d at 1316. It may also reveal “an intentional disclaimer, or disavowal, of claim scope by the inventor.” *Id.* Therefore, the claims are to be construed in a way that makes them consistent with, and no broader than, the invention disclosed in the specification. *On Demand*, 442 F.3d at 1340 (“[C]laims cannot be of broader scope than the invention that is set forth in the specification.”); *Phillips*, 415 F.3d at 1316 (“[C]laims must be construed so as to be consistent with the specification, of which they are a part.”).

Nevertheless, courts must be careful to “us[e] the specification [only] to interpret the meaning of a claim” and not to “import[] limitations from the specification into the claim.” *Phillips*, 415 F.3d at 1323; *see also Gillette Co. v. Energizer Holdings, Inc.*, 405 F.3d 1367, 1375 (Fed. Cir. 2005) (internal quotations omitted). A patent’s “claims, not specification embodiments, define the scope of patent protection.” *Kara Tech. Inc. v. Stamps.com Inc.*, 582 F.3d 1341, 1348 (Fed. Cir. 2009); *see also Martek Biosciences Corp. v. Nutrinova, Inc.*, 579 F.3d 1363, 1381 (Fed. Cir. 2009) (“[E]mbodiments appearing in the written description will not be used to limit claim language that has broader effect.”). “In particular, we have expressly

rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment.” *Phillips*, 415 F.3d at 1323. This is “because persons of ordinary skill in the art rarely would confine their definitions of terms to the exact representations depicted in the embodiments.” *Id.*

Although this distinction “can be a difficult one to apply in practice[,] . . . the line between construing terms and importing limitations can be discerned with reasonable certainty and predictability if the court’s focus remains on understanding how a person of ordinary skill in the art would understand the claim terms.” *Id.* Ultimately, “[t]he construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.” *Id.* at 1316 (citing *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998)).

C. The Prosecution History

After the specification and the claims themselves, the prosecution history is the next best indicator of term meaning. The prosecution history consists of the complete record of the proceedings before the PTO and includes the prior art cited during the examination of the patent. *Id.* at 1317. “Like the specification, the prosecution history provides evidence of how the PTO and the inventor understood the patent.” *Id.* “[T]he prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” *Id.* (citing *Vitronics*, 90 F.3d at 1582-83).

However, “because the prosecution history represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation, it often lacks the

clarity of the specification and thus is less useful for claim construction purposes.” *Id.* As a result, courts generally require that “a patent applicant [] clearly and unambiguously express surrender of [a] subject matter” to disavow claim scope during prosecution. *Voda v. Cordis Corp.*, 536 F.3d 1311, 1321 (Fed. Cir. 2008) (quoting *Sorensen v. Int’l Trade Comm’n*, 427 F.3d 1375, 1378 (Fed. Cir. 2005)).

D. Extrinsic Sources

Extrinsic evidence consists of “all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.” *Phillips*, 415 F.3d at 1317. It “can help educate the court regarding the field of the invention and can help the court determine what a person of ordinary skill in the art would understand claim terms to mean.” *Id.* at 1319. However, extrinsic evidence suffers from a number of defects, including its independence from the patent, potential bias, and varying relevance. *Id.* at 1318-19. Such evidence is therefore “unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence,” and courts may consider, or reject, such evidence at their discretion. *Id.* at 1319.

III. Analysis

The proposed constructions of the disputed terms in the ’238 and ’991 patents are as follows:

CLAIM TERM	PLAINTIFF’S PROPOSED CONSTRUCTION	DEFENDANTS’ PROPOSED CONSTRUCTION
“manipulate the data”	“modifying the digital representation of the data, for example by increasing the amount of redundant data”	“change the values of the digital data to reduce errors (as opposed to control or format the data)”

“formatting data”/ “change the format”	“modifying the digital representation of the data, for example by increasing the amount of redundant data”	“changing by increasing the redundant information in the digital data to reduce errors (as opposed to manipulate or control the data)”/“able to increase the redundant information in the digital data to reduce errors (as opposed to manipulate or control the data)”
“attached to the patient”/ “arranged on the patient”	[plain and ordinary meaning]	“capable of being mounted on a patient”/“capable of being positioned on a patient”
“covering comprising”	[plain and ordinary meaning]	“component made of, at least, the claimed collection of electronic components”

A. “Manipulate the Data”/“Formatting Data”/“Change a Format”

Plaintiff proposes the same construction for two of the terms—the “manipulate” term and the “format” term—contending that they have the same meaning. Defendants propose their own construction. Because resolution of that dispute requires comparative analysis, the Court will consider the terms in tandem. The parties also dispute whether plaintiff’s and defendant’s respective exemplary clauses are necessary and appropriate.⁷

⁷ Initially, the parties appeared to dispute whether the claimed invention manipulated digital representations of the data or the perceived data. However, post-hearing briefing has clarified that the parties agree that it is the former. (See Def. Letter Brief at 2).

The patent teaches that the claimed invention detects a patient property, converts that property into an electric signal, and then converts that signal into digital data (generally in the form of binary code) that is transmitted to the evaluation station. The claims then recite as an additional step that the invention can format or manipulate “data transmitted by said electrode,” “data transmitted by the evaluator station,” or “digital data.” ’238 patent col.29, ll.39-40; ’991 Patent col.27 ll.40-41, col.29 ll.3, col.29 ll.45, col.30 ll.5. Similarly, the specifications explain that the evaluation station can manipulate “data emitted by the electrodes.” ’238 patent col.3 ll.57-59. Because only digital data is transmitted, those passages make clear that the claimed invention formats or manipulates the digital data, not the patient property or the electric signal. That is, for example, if the sensor detected a heart rate of 60 and changed that reading to an electric signal, and then the converter translated the signal into “111100,” the evaluation station or electrode would manipulate or format the “111100,” not the “60” or the signal. To resolve any ambiguity about to what “data” the claims refer, the construction of “digital representation of the data,” as proposed by plaintiff, adequately describes the scope and concept expressed in the patent. Accordingly, the Court will adopt that construction.

The term “manipulate the data” appears in claim 1 of the ’238 patent. That claim states:

A medical system for acquiring measured data, in particular for monitoring body function, comprising:

at least one evaluation station . . . ;

one electrode . . . said electrode comprising:

at least one sensor . . . ;

a covering comprising:

at least one converter for converting the electric signal generated by said sensor into a digital value;

at least one transmitter coupled to said at least one converter for transmitting the digital data to the receiver in said evaluation station; and

at least one receiver for receiving data transmitted by the evaluation station transmitter; and

at least one error diagnosis and correction unit coupled to at least one of said electrode and evaluation station for detecting errors in the received data;

whereby the data transmitted by said evaluation station to said electrode can *manipulate the data* transmitted by said electrode to the evaluation station.

’238 patent col.29 ll.16-40 (emphasis added). The term “formatting data” and “change the format” appears in claims 1 and 37 of the ’991 patent. The use in claim 1 is typical:

A medical system for monitoring body functions of a patient comprising:

at least one sensor . . . ;

at least one converter . . . ;

at least one transmitter . . . the transmitter operable to wirelessly transmit the digital data to an evaluator station located remotely from the patient; and

at least one receiver operable to receive information through wireless communication, the information including *formatting data* transmitted by the evaluator station, the formatting data operable to *change a format* for transmission of the digital data from the transmitter to the evaluator station.

'991 Patent col. 27 ll.24-43 (emphasis added). *See id.* col.29 ll.42-46 (claim 37: “wherein the evaluator station is operable to *change the format* of the digital data transmitted from the transmitter to the evaluator station” (emphasis added)).

Plaintiff proposes that the terms be construed as “modifying the digital representation of the data, for example by increasing the amount of redundant data.” However, at the *Markman* hearing, it suggested an alternative construction that omitted the exemplary subordinate clause. In support, plaintiff cites the claims themselves and the specification, which it reads as disclosing two responses to transmission problems: control of the data and manipulation or formatting of the data. It also relies on an expert, Dr. Michael Kotzin, who expressed an opinion that the terms have the same meaning. (*See* Pl. Mem., Vowell Decl., Ex. E ¶ 8). Furthermore, plaintiff contends that alteration through manipulation or formatting changes the digital representation of the data (that is, the binary code representing the property detected in the patient), not the underlying data detected in the patient, and that the operation is not limited only to increasing the redundancy of the data.

Defendants contend that the terms have different meanings. They propose that the term “manipulate” be construed to mean “change the values of the digital data to reduce errors (as opposed to control or format the data)”; that the term “formatting data” be construed to mean “changing by increasing the redundant information in the digital data to reduce errors (as opposed to manipulate or control the data)”; and that the term “change the format” be construed

to mean “able to increase the redundant information in the digital data to reduce errors (as opposed to manipulate or control the data).” In substance, defendants assert that “formatting” relates to increasing the redundancy of the data and “manipulation” relates to changing the data. Defendants rely on the claim differentiation doctrine, noting that dependent claim 30 of the ’991 patent uses the word “manipulate.” *See* ’991 Patent col.29 ll.1-3 (“The medical system of claim 1 wherein the transmitter is responsive to the received information, the received information operative to manipulate the digital data.”). Defendants also argue that the only purpose of any alteration of the data would be error reduction, because that is the only purpose disclosed in the specification and because plaintiff so argued during the prosecution of the patent.

The first question is whether the two sets of terms are equivalent. The record as a whole indicates that they are not. Under the doctrine of claim differentiation, “the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim.” *Phillips*, 415 F.3d at 1315. If the independent claim contained all of the same requirements as the dependent claim, it would be as narrow as the dependent claim and the separate dependent claim would serve no purpose. Claim differentiation is “based on the common sense notion that different words or phrases used in separate claims are presumed to indicate that the claims have different meanings and scope,” so that “limitations stated in dependent claims are not to be read into the independent claim from which they depend.” *Karlin Tech., Inc. v. Surgical Dynamics, Inc.*, 177 F.3d 968, 971-72 (Fed. Cir. 1999). Furthermore, the doctrine of claim differentiation encourages courts to use differences among claims as a guide in understanding the meaning of a claim term. *See Phillips*, 415 F.3d at 1314-15. Here, the ’991 patent uses the term “format” in independent claims 1 and

37, whereas it uses the term “manipulate” in dependent claims 30 and 45. Plaintiff has not provided sufficient evidence to rebut the presumption that the two sets of terms have different meanings.

In addition, the specification states that the evaluator station “is capable also of controlling the data transmission, or to manipulate on its own the data emitted by the electrodes” but that it “can also cause the electrode to change the data format for the transmission” ’991 Patent, col.3 ll.44-46, 56-58. The patent’s description of different components—the evaluator station and the electrode—conducting the different functions belies plaintiff’s argument that those functions are identical. Accordingly, the Court will construe the terms to have separate meanings.

The question then becomes the meanings of the terms “manipulate” and “format.” As to “manipulate,” the specifications discuss the evaluation station’s capacity, in the event of transmission problems, “to reconstruct falsely transmitted data” by “transmitting test codes.” *See* ’238 patent col.3 ll.54-59, col.4 ll.14-19. As a simplistic example, that suggests that if the station detects what it perceives to be an error— a heart rate of “1111000” (120)—it could send test code “10.” If the electrode returned test code “100,” then the station would recognize an interference that added an additional “0” and adjust the digital representation of the data accordingly (that is, by removing the terminal “0”). Defendants’ proposed construction that “manipulate” means “change the values” appropriately captures that concept. However, defendants inserted in their construction the additional limitation that the change is made “to reduce errors.” The Federal Circuit has cautioned against reading examples from a specification as limitations on a claim. *See, e.g., Wenger Mfg., Inc. v. Coating Mach. Sys., Inc.*, 239 F.3d 1225, 1233 (Fed. Cir. 2001). However, the claims themselves indicate that the purpose of

manipulation of the data is error correction. Claim 1 of the '238 patent states that the invention includes

at least one error diagnosis and correction unit coupled to at least one of said electrode and evaluation station for detecting errors in the received data; whereby the data transmitted by said evaluation station to said electrode can manipulate the data transmitted

'238 patent col.29 ll.35-40. Inclusion of a statement of purpose appears justified and supported by the patent as a whole. Finally, because the “manipulate” and “format” terms will be construed with different meanings, defendants’ proposal to include a parenthetical distinguishing the terms provides useful clarity. Accordingly, the Court will construe “manipulate the data” as “change the values of the digital representation of the data to reduce errors (as opposed to control or format the data).”

As to “format,” the specifications discuss changing the format of the data in the context of increasing redundant information to reduce errors. *See* '238 patent col.4 ll.2-7, 49-54. Defendants’ proposed construction therefore is not entirely incorrect. However, it appears to be too narrow. Unlike the uses of the “manipulate” term, the uses of the “format” term in the claims themselves are not preceded by a clause addressing error reduction. Plaintiff has suggested that other purposes include security (by data encryption) or size modification (by compression). (*See* Pl. Mem. at 13). Also, dependent claim 13 of the '991 patent specifically claims the system of claim 1 “wherein the received information is operable to change an amount of redundancy in the digital data.” '991 Patent col.28 ll.8-10. By inference, the independent claim must be broader than that. Moreover, the specification explicitly designates increasing redundancy as an “example.” Thus, redundancy appears to be a preferred, but not the only, embodiment. *See Baldwin Graphic Sys., Inc. v. Siebert, Inc.*, 512 F.3d 1338, 1345 (Fed. Cir.

2008) (cautioning that “courts must carefully avoid importing limitations from the specification into method claims”).

Neither plaintiff’s nor defendants’ proposals precisely capture the concept of formatting as expressed in the patents. The Court therefore will adopt a hybrid construction. In the patents at issue, the term “formatting data” shall mean “modifying the digital representation of the data (but not manipulating or controlling the data)” and the term “change the format of the digital data” shall mean “modify the digital representation of the data (as opposed to manipulate or control the data).”

B. “Attached to the Patient”/“Arranged on the Patient”

The term “attached to the patient” appears in claims 1 and 36 of the ’238 patent. Claim 1, which is typical, states as follows:

A medical system for acquiring measured data, in particular for monitoring body function, comprising:

at least one evaluation station . . . ;

one electrode allocated to each evaluation station and *capable of being attached to a patient*, said electrode comprising:

at least one sensor . . . ;

[and]

a covering

’238 patent col.29 ll.16-27 (emphasis added). The term “arranged on the patient” appears in claims 1 and 37 of the ’991 patent. The use in claim 1 is typical:

A medical system for monitoring body functions of a patient comprising:

at least one sensor *capable of being arranged on the patient* and operable to detect an electrical, physical, chemical, or biological property associated with the patient, and operable to convert the detected property

into an electric signal;
at least one converter . . . ;
at least one transmitter . . . ; and
at least one receiver

'991 Patent col. 27 ll.24-38 (emphasis added).

Defendants propose that the term “capable of being attached to the patient” should be construed as “capable of being mounted on the patient” and that the term “capable of being arranged on the patient” should be construed as “capable of being positioned on the patient.” It cites the specification to support its argument that the electrode must be physically touching or resting close to the patient’s skin rather than being connected by a wire, cable, or tube.

Plaintiff agrees that the electrode must be physically on or near the patient and that it communicates wirelessly with the evaluation station. It contends, however, that no construction of the terms is necessary and that their plain and ordinary meaning should be adopted. It notes that figures in the patents disclose where electrodes would be placed on a person’s body to collect certain measurements and cites the patents’ specifications, which repeatedly describe the electrodes as “attached” to or “arranged” on a person’s body.

The dispute, therefore, is not the scope of the claims themselves, but how best to express that scope. Indeed, defendants’ particular concern appears to be that if the terms are not construed, plaintiff may adopt a different argument at a later date. However, its proposed constructions do little to ensure that its desired meaning is conveyed. The replacement of “attached” and “arranged” with “mounted” and “positioned” does not limit the scope of the claim to describe physical closeness between the electrode and the patient; it merely replaces an easily understood word with a near-synonym. Furthermore, as plaintiff points out, the

specification uses the word “mounted” to describe a prior invention in which a sensor is, in fact, attached by a wire to a monitoring station. *See* ’238 patent, col.1 ll.41-45. It therefore appears preferable to avoid creating a parallel structure when the patent’s drafter sought to draw a distinction. In contrast, the specification repeatedly utilizes the word “attached” to describe the relationship between the patient and the electrode or sensor. *See* ’238 patent col.12 ll.15-19, col.24 ll.35-40, col.24 ll.58-60, col.25 ll.22-24.

Moreover, the risk of plaintiff changing its position at this stage of litigation is low and doing so could present issues of estoppel and have other consequences. Plaintiff has clearly staked out its position that the electrode must be on (or at least near) the patient’s skin and must communicate with the evaluation station without wires or similar connections. That reading is, in any event, consistent with the language of the patents.

In such circumstances, the prudent course is to adopt the plain and ordinary meanings of the terms. The words of the patent, as chosen by its drafter, can be readily comprehended by a layperson, and their adoption would resolve the parties’ dispute. *See O2 Micro*, 521 F.3d at 1361 (holding that a court need not construe a claim if it is understandable to a layperson and adopting the plain and ordinary meaning would resolve the dispute). Accordingly, the Court will construe the terms “attached to” and “arranged on” the patient to have their plain and ordinary meanings.

C. “Covering Comprising”

The term “covering comprising” appears in claims 1 and 36 of the ’238 patent. Claim 1, which is typical, states:

A medical system for acquiring measured data, in particular for monitoring body function, comprising:

at least one evaluation station . . . ;

one electrode . . . said electrode comprising:

at least one sensor . . . ;

a *covering comprising*:

at least one converter . . . ;

at least one transmitter . . . ; and

at least one receiver . . . ; and

at least one error diagnosis and correction unit

'238 patent col.29 ll.16-37 (emphasis added).

Defendants propose that “covering comprising” be construed as “component made of, at least, the claimed collection of electronic components.” They cite to caselaw for the proposition that the use of the word “comprising” means that the elements listed thereafter must be included in the item described, but that other elements could also be included. *See Genentech Inc. v. Chiron Corp.*, 112 F.3d 495, 501 (Fed. Cir. 1997) (describing that the term “comprising” is a “term of art used in claim language which means that the named elements are essential, but other elements may be added and still form a construct within the scope of the claim”). Defendants urge that some construction of the term is necessary because it is disputed.

Plaintiff, in turn, contends that no construction is needed because the meaning is sufficiently clear from the context. It argues that defendants’ proposal provides no additional clarity and may, in fact, introduce confusion by using the word “component,” which is elsewhere used to describe the evaluation station, electrode, and sensor.

Read in context, the elements that make up the “covering” described in the patent are clear. The claims explicitly state that a “covering” includes a converter, a transmitter, a receiver,

and a diagnosis and correction unit. Defendants' proposed construction would only render the claim redundant, and more likely create confusion than clarity. *See U.S. Surgical Corp.*, 103 F.3d at 1568 (Fed. Cir. 1997) ("Claim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims It is not an obligatory exercise in redundancy.").

Furthermore, while it is undoubtedly the role of the court to construe the claims of a patent, it need not adopt a construction that is different from the words of the patent itself. As noted, the Court is not required to provide additional language construing a claim if its ordinary meaning can be readily understood by a layperson and adopting it would resolve the parties' dispute concerning interpretation. *See O2 Micro*, 521 F.3d at 1361. Those conditions are clearly met here.

Accordingly, the Court will adopt the plain and ordinary meaning of the term "covering comprising."

IV. Conclusion

For the foregoing reasons, the disputed claim terms are construed as follows:

1. the term "manipulate the data" means "change the values of the digital representation of the data to reduce errors (as opposed to control or format the data)";
2. the term "formatting data" means "modifying the digital representation of the data (but not manipulating or controlling the data)" and the term "change the format of the digital data" means "modify the digital representation of the data (as opposed to manipulate or control the data)."
3. the terms "attached to the patient" and "arranged on the patient" will be construed

according to their plain and ordinary meanings; and

4. the term “covering comprising” will be construed according to its plain and ordinary meaning.

So Ordered.

Dated: October 17, 2014

/s/ F. Dennis Saylor
F. Dennis Saylor IV
United States District Judge